MN GENE AND PROTEIN

ABSTRACT OF THE DISCLOSURE

A new gene--MN--and proteins/polypeptides encoded therefrom are disclosed. Recombinant nucleic acid molecules for expressing MN proteins/polypeptides and recombinant proteins are provided. Expression of the MN gene is disclosed as being associated with tumorigenicity, and the invention concerns methods and compositions for detecting and/or quantitating MN antigen and/or MN-specific antibodies in vertebrate samples that are diagnostic/prognostic for neoplastic and pre-neoplastic disease. Test kits embodying the immunoassays of this invention are provided. MN-specific antibodies are disclosed that can be used diagnostically/prognostically, therapeutically, for imaging, and/or for affinity purification of MN proteins/polypeptides. Also provided are nucleic acid probes for the MN gene as well as test kits comprising said probes. The invention also concerns vaccines comprising MN proteins/polypeptides which are effective to immunize a vertebrate against neoplastic diseases associated with the expression of MN proteins. The invention still further concerns antisense nucleic acid sequences that can be used to inhibit MN gene expression, and polymerase chain reaction (PCR) assays to detect genetic rearrangements.